

Sumihiko HATUSIMA\*: Five new species of *Asarum* from  
Southern Kyushu and the Ryukyus

初島住彦\*: 南九州及び琉球列島産カンアオイの五新種

1. *Asarum yaeyamense* Hatusima, sp. nov., fig. 1 and 6-1.

Rhizoma abbreviatum. Folia sempervirentia, ovato-cordata, 10-20 cm longa et 8-13 cm lata, apice acuminata vel acuta ad summum obtusa, basi profunde cordata, supra nunquam albido-variegata atro-viridia glabra. Cataphylla late ovata viridescens ca. 1 cm longa glabra margine ciliolata. Petiola 15-17 cm longus purpurascens. Pedunculus ca. 1 cm longus. Calyx; tubo globoso-campanulato 1-1.5 cm longo, basi truncato 1-1.3 cm lato, apicem versus paulo angustato, piloso, purpureo-viridescens, intus reticulato, fauce anguste annulato (annulo ca. 2.5 mm lato), lobis divaricatis, late ovatis, 1.5 cm longis et 1.6 cm latis, supra dense hirsutis purpureo-viridescens, subtus glabris, margine undulatis. Stamina 12, antheris lineari-lanceolatis ca. 2.5 mm longis. Styli 6, ca. 3.5 mm longi, apice vix recurvati.

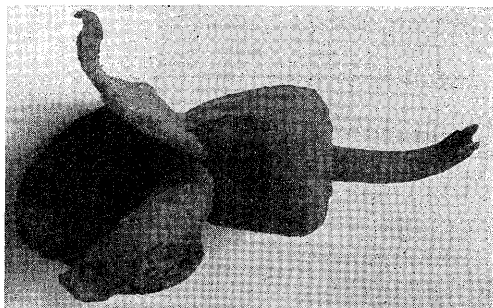


Fig. 1. A flower of *Asarum yaeyamense* Hatus. ( $\times 1.3$ ).

Hab. Ryukyus: Isl. Iriomote: T. Yamazaki et H. Usui, 1963, cultivated in Kagoshima city, (Type in the Herbarium of Facul. Agric. Kagoshima Univ.); Nakara River, alt. 150 m, T. Yamazaki 2610, Walker 6877; along Urauchi River, alt. 5 m, S. Hatusima 18579, 18625, 18728.

This is very near to *A. Fujinoi* T. Ito of Amami-oshima in its vegetative character, but differs by its greenish and dark purplish flowers with pubescent undulate calyx lobes.

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2. *Asarum okinawense* Hatusima, sp. nov., fig. 6-2.

Rhizoma abbreviatum. Folia sempervirentia, ovato-cordata 5-6 cm longa et 5-6 cm lata, apice acuta ad summum obtusa, basi profunde cordata, lobis basilaribus inter se paulo imbricatis, supra glabra atro-viridia opaca pauce pilosa demum glabra, albo-maculato-variegata, subtus glabra sed primo ad costam pilosa, margine primo ciliolata. Flores pedunculati, circ. 1 cm in diam. Calyx; tubo tubuloso 7 mm longo et 7 mm lato, glabor, dilute flavo-viridescens, intus reticulum vix prominente, fauce annulato (annulus ca. 3 mm in diam.), lobis ovato-triangularibus, divaricatis, acutis, 5 mm longis, basi 6 mm latis, supra haud rugulosis dilute flavo-viridescens basin versus pallide rubescentibus glabris, margine pauce ciliotatis. Stamina 12, ca. 3 mm longa, versus intus paulo curvata, antheris lineari-lanceolatis ca. 2 mm longis, filamentis 1 mm longis. Styli 6, ca. 3.5 mm longi, apice paulo recurvati et corniculatim bilobati.

Hab. Ryukyus: near the summit of Mt. Katsuudake, alt. 500 m, Isl. Okinawa, K. Shinjo (cultivated in Kagoshima city and flowered on Apr. 21, 1966), (Type in the Herbarium of Facul. Agric. Kagoshima Univ.).

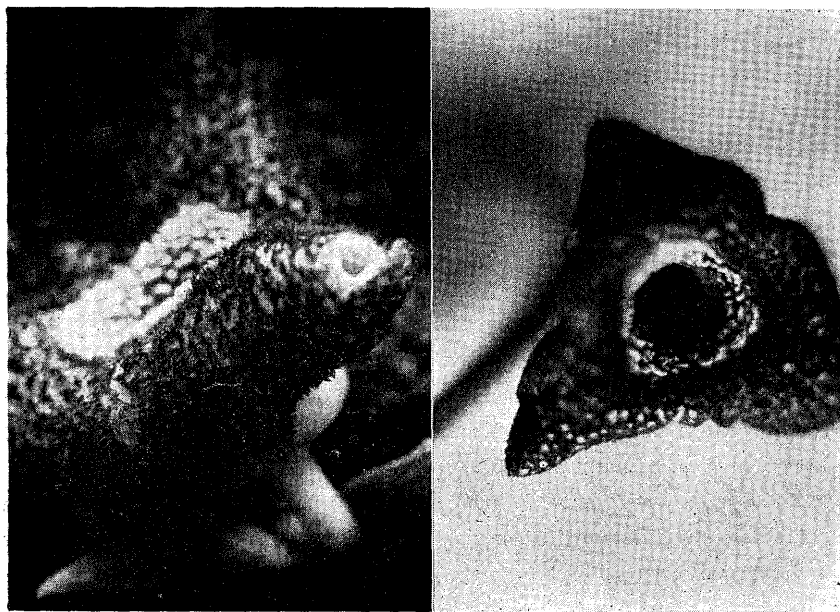


Fig. 2. *Asarum hirsutisepalum* Hatus. Flowers seen from half side ( $\times 2$ ) and front ( $\times 1.2$ ).

This is well characterized by small leaves, incurved stamens, and its more or less recurved stigma with two hornlike lobes.

3. *Asarum hirsutisepalum* Hatusima, sp. nov., fig. 2.

*Rhizoma abbreviatum*. Folia plerumque 2, sempervirentia, ovato-cordata, 10-15 cm longa et 7-10 cm lata, apice acuta, basi profunde cordata, supra atroviridia, lucida glaberrima, nunquam albo-maculato-variegata, subtus opaca glabra. Petiolus 10-15 cm longus ca. 3 mm crassus, purpureo-virescens. Flores pedunculati ca. 4.5 cm in diam. Pedunculus 5-10 mm longus ca. 2 mm crassus, pallide viridis. Bractee 2, ovato-rotundata ca. 1.5 cm longae, virides, purpureo-nervatae. Calyx; tubo tubuloso ca. 1 cm longo et 1.2-1.4 cm lato, intus valde reticulato, lobis late ovatis, ca. 1.6-2.3 cm longis et 1.8-2.0 cm latis, apice acutis, margine valde revolutis, primo erectis demum patentibus, supra flavo-albescentibus pilis 0.5-1 mm longis purpureis fasciculatim dense vestitis. Stamina 12, ca. 3 mm longa, antheris 2.5 mm longis et 0.8 mm latis. Styli 6, ca. 6 mm longi apice vix bilobulati. Stigma ovatum ca. 2.5 mm longum.

Hab. Kyusyu: along Nakama River, alt. 300 m, Isl. Yakushima, S. Sako 4568 (Type in the Herbarium of Facul. Agric. Kagoshima Univ.) and 4577; March 24, 1963, M. Sato 1574 (fl.).

This is well characterized by large glabrous leaves not variegated above, large flowers with yellowish white calyx lobes densely covered by purple fasciculate hirsute hairs.

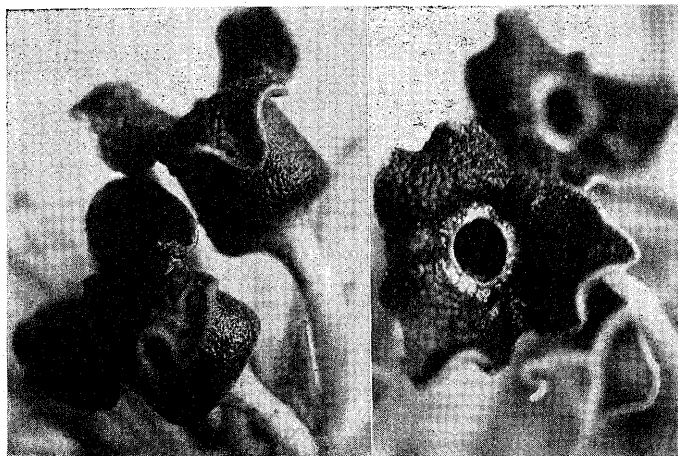


Fig. 3. *Asarum nomadakensis* Hatus. Flowers seen from side and front ( $\times 1.4$ ).

4. *Asarum nomadakense* Hatusima, sp. nov., figs. 3, 4 and 6-3.

Rhizoma abbreviatum. Folia sempervirentia, ovato-cordata, 10-16 cm longa et 8-11 cm lata, apice breviter acuminata, basi profunde cordata, supra glabra, albido-maculato-variegata, subtus glabra sed ad costam nervisque pilosa. Flores pedunculati, pedunculis 2-3 cm longis 2-2.5 mm crassis dilute viridibus puberulis. Calyx; tubo tubuloso ca. 1 cm longo, 1-1.2 cm lato, atro-purpureo, pubescente, intus valde reticulato, lobis ovatis, apice acutis, 1.3 cm

longis et 1 cm latis, supra atro-purpureis rugosis. Stamina 10, ca. 3 mm longa, antheris 2 mm longis. Styli 5, 3 mm longi, apice vix bilobulati.

Hab. Kyusyu: Mt. Nomadake, Prov. Satsuma, alt. 400 m, M. Hegi (cultivated in Kagoshima city and flowered on Nov. 5, 1967), (Type in the

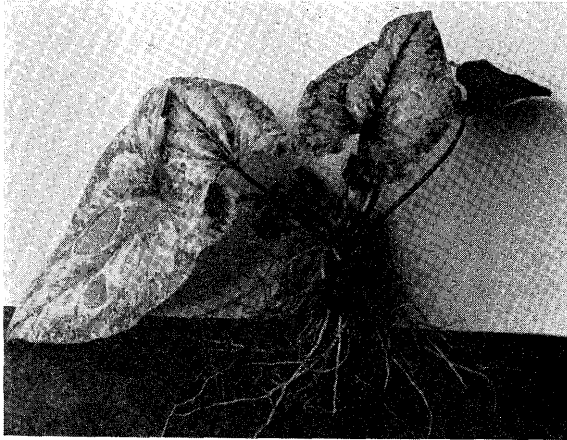


Fig. 4. *Asarum nomadakense* Hatus. ( $\times 1/3$ ).

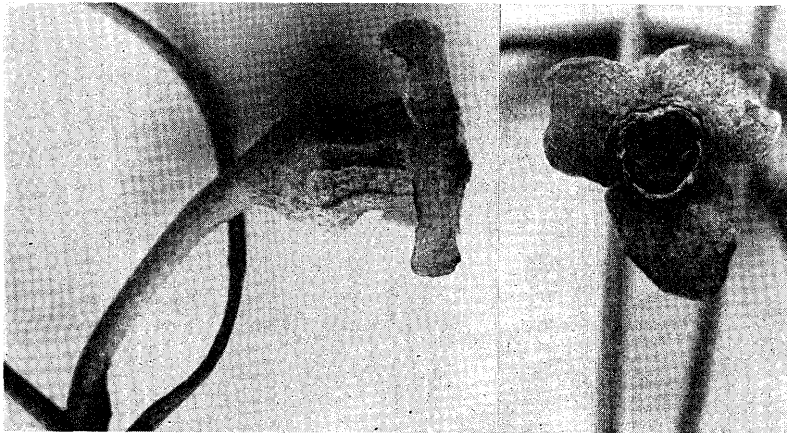


Fig. 5. *Asarum Yamashiroi* Hatus. Flowers seen from side and front ( $\times 1.5$ ).

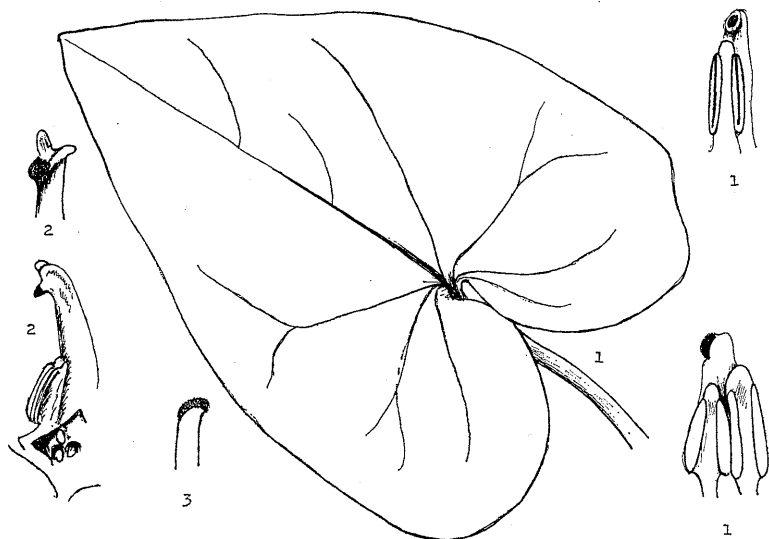


Fig. 6. A leaf and the forms of style.

1: *A. yaeyamense* Hatus. 2: *A. okinawense* Hatus. 3: *A. nomadakensense* Hatus.

Herbarium of Facul. Agric. Kagoshima Univ.)

This species somewhat resembles *A. tamaense* Maekawa, but differs by its narrower and longer calyx tubes with patent calyx lobes.

5. ***Asarum Yamashiroi*** Hatusima, sp. nov., fig. 5.

*Rhizoma abbreviatum*. Folia sempervirentia, ovato-cordata, 7-8 cm longa, 4-5.5 cm lata, apice obtusa, basi profunde cordata, supra glabra sed ad prope marginem nervisque hirsuta, albo-maculato-variegata, subtus glabra. Petiolus 6-9 cm longus glaber. Flores pedunculati, pedunculis ca. 8 mm longis et 1.5 mm crassis. Calycis lobi late ovati, 1.5 cm lati et 1.2 cm longi, apice obtuso-acuti, purpurascens, intus hirsutuli. Calycis tubus campanulatus, 1.3 cm longus et 1.2 cm latus, supra 1/3 paulo constrictus et longitudinaliter 6-costatus, purpurascens, intus reticulatus. Stamina 12, ca. 4 mm longa, antheris lineari-lanceolatis 3.5 mm longis. Styli corniculatim elongati, ca. 2 mm longi, apice vix bilobulati. Semina sub-hemiovoidea, acuta, 3 mm longa, 2.2 mm lata, fusca.

Hab. Kyusyu: Mt. Gongen-yama, Shimomasuki-gun, Pref. Kumamoto, K. Ueda, June 6, 1965, (Type in the Herbarium of Facul. Agric. Kagoshima Univ.)

This is well characterized by its calyx tubes constricted below the middle part which has six longitudinal keels.

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1. ヤエヤマカンアオイ (新称) 琉球列島の石垣、西表両島だけに産するカンアオイで、葉だけ見ると奄美大島のフジノカンアオイを思わせるが、花は全く異っている。花は帯緑紫色で萼片が波曲する点はヤクシマカンアオイに似ている。然し葉に白斑が出ないので直に区別出来る。花柱の形はアマギカンアオイに近い。

2. ヒナカンアオイ (新称) 沖縄島のカツウ岳の頂上付近に稀産し、葉は小さく長さ 5~6 cm で奄美大島のミヤビカンアオイを思わせる。花柱の形はダイリニアオイやサツマアオイに似ているが、花筒の先はくびれないのでダイリニアオイ節のものではない。

3. オニカンアオイ (新称) 屋久島の南西部の仲間川やモッチョン岳の上部などに見られる非常に変わったカンアオイである。葉は長さ 10~15 cm で大きく、ヤクシマカンアオイのように白斑は出ない。花は大輪で径 4~5 cm もあり、色は淡黄色で萼裂片の上面には、全面に長さ 0.5~1 mm 位の紫色の粗毛を束生するのが特長である。

4. ノマダケカンアオイ (新称) 薩摩の野間岳の 9 合目付近に稀産するカンアオイで、葉は白斑があり上面に光沢がある。花柱の形はアマギカンアオイやタマノカンアオイなどに似ている。野間岳にはキンチャクアオイも産するが、同種とは葉の上表の光沢で区別出来る。

5. ヒゴカンアオイ (新称) 熊本の山城学氏が、熊本県下益城郡中央村の権現岳の頂上付近で採集され、筆者の所に生品を送って下さったものである。本種はキンチャクアオイ群とランヨウアオイ群の中間にあるもので、花柱の形は後者に、花筒の形は前者に近いが、下から 1/3 位の所でくびれ 6 個の縦稜を有するのが特徴である。

#### ○地衣類思い出話 (10) (富樫 誠) Makoto TOGASHI: Miscellaneous notes on lichens or lichenological survey (10)

昭和 27 年 4 月春も漸く酣になった頃、朝比奈先生の三島別荘に滞在し毎日近辺をあさって居たが、或日先生と当時の助手岸 (佐々門) 富子さんと三人で、御殿場郊外の東山へ通う道路に沿う或る大きな神社の境内にあった杉の巨木に群生して居た葉状地衣を根こそぎ採集したことがある。先生はこれを新種として *Cetraria Togashii* と命名された。あとで先生のハーバリウムをよく調べたら、これと同種の標本が日光、白根山産 July 1924, 緒方正資氏の日光湯元、兎島産 27. VII. 1930, 橋本亮氏の採集品が何れも別の誤った名称で入って居たので、此の年の秋先生と同伴して日光湯元に行き、多量の標本を採集することができた。